UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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NOTICE OF ALLOWANCE AND FEE(S) DUE

29122 7590 05/02/2008
ALSTON & BIRD LLP
PIONEER HI-BRED INTERNATIONAL, INC.

PIONEER HI-BRED INTERNATIONAL, IN BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000 EXAMINER

KUBELIK, ANNE R

ART UNIT PAPER NUMBER

1638 DATE MAILED: 05/02/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,978	07/11/2003	Rafael Herrmann	035718/260673	4095

TITLE OF INVENTION: ISOLATED NUCLEIC ACID MOLECULES ENCODING ORALLY ACTIVE ANDROCTONUS AMOREUXI PESTICIDAL BIOPEPTIDES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$0	\$0	\$1440	08/04/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This f appropriate. All further co- indicated unless corrected maintenance fee notification	orm should be used for orrespondence including below or directed others.	or trans ig the P ierwise i	mitting the ISSU atent, advance or in Block 1, by (a					hould be completed where correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDEN	ICE ADDRESS (Note: Use Blo	ock 1 for a	ny change of address)	par	ers. Each additiona	ı paper	can only be used fo icate cannot be used f , such as an assignme ling or transmission.	r domestic mailings of the or any other accompanying nt or formal drawing, must
ALSTON & BIF PIONEER HI-BR BANK OF AMER	ED INTERNATION PLAZA	ONAL		T be	Cer	tificate	of Mailing or Trans	mission g deposited with the United t class mail in an envelope above, or being facsimile ate indicated below.
CHARLOTTE, N	ON STREET, SU C 28280-4000	11E 40)00					(Depositor's name)
				_				(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		CONFIRMATION NO.
10/617,978 TITLE OF INVENTION: BIOPEPTIDES	07/11/2003 ISOLATED NUCLEI	C ACII) MOLECULES	Rafael Herrmann ENCODING ORALLY	ACTIVE ANDRO		035718/260673 US AMOREUXI PES'	4095 TICIDAL
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nonprovisional	NO		\$1440	\$0	\$0		\$1440	08/04/2008
EXAMIN	NER	- /	ART UNIT	CLASS-SUBCLASS	1			
KUBELIK,	ANNE R		1638	800-302000	_			
1. Change of corresponder CFR 1.363. Change of corresponder Address Form FTO/SB/ TFE Address Findle FTO/SB/47; Rev 03-05. 3. ASSIGNEE NAME AN PLEASE NOTE: Underconduction as set forth (A) NAME OF ASSIGNEE (A) NAME OF ASSIGNEE (B) TENDER TO THE TRANSPORTER TO	ndence address (or Cha 122) attached. ation (or "Fee Address" or more recent) attach D RESIDENCE DATA ss an assignee is identi in 37 CFR 3.11. Comp	nge of C "Indicat ed. Use	Correspondence ion form of a Customer		o 3 registered pater wely, le firm (having as a agent) and the nam orneys or agents. If printed. pe) patent. If an assign assignment.	memb es of u no nam	er a 2	ocument has been filed for
Please check the appropria	te assignee category or	categori	ies (will not be pr	inted on the patent):	Individual 🗖 C	orporati	on or other private gro	oup entity Government
4a. The following fee(s) are submitted: Itsue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies				o. Payment of Fee(s): (Ple A check is enclosed. Payment by credit ca The Director is hereb overpayment, to Dep	rd. Form PTO-2038	is atta	ched.	
 Change in Entity Statu a. Applicant claims 	SMALL ENTITY statu	is. See 3	7 CFR 1.27.	☐ b. Applicant is no los				
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if requered of the United Sta	uired) w tes Pater	ill not be accepted at and Trademark	from anyone other than Office.	the applicant; a reg	stered a	attorney or agent; or th	e assignee or other party in
Authorized Signature _					Date			
Typed or printed name					Registration N			
This collection of informat an application. Confidentis submitting the completed this form and/or suggestion Box 1450, Alexandria, Vir Alexandria, Virginia 2231:	tion is required by 37 C ality is governed by 35 application form to the ns for reducing this bur- ginia 22313-1450. DC 3-1450.	FR 1.31 U.S.C. USPTC rden, sho NOT S	The information The information Time will vary ould be sent to the END FEES OR	on is required to obtain or 1.14. This collection is es depending upon the indi e Chief Information Offic COMPLETED FORMS T	retain a benefit by stimated to take 12 vidual case. Any co er, U.S. Patent and O THIS ADDRES:	he publ minutes omment Traden S. SENI	tic which is to file (and to complete, including s on the amount of tire ark Office, U.S. Deptor of the complete of the comple	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



CHARLOTTE, NC 28280-4000

UNITED STATES PATENT AND TRADEMARK OFFICE

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PIONEER HI-BRI	ED INTERNATIONAL	ART UNIT	PAPER NUMBER	
BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000			1638 DATE MAILED: 05/02/200	8

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 199 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 199 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
•••	
10/617,978	HERRMANN ET AL.
Examiner	Art Unit
Anno D. Kuholik	1620

— The MAILING DATE of this communication appears on the All claims being allowable, PROSECUTION ON THE MERITS IS (OR RENerrewith (or previously mailed), a Notice of Allowance (PTOL-85) or other NOTICE OF ALLOWABLITY IS NOT A GRANT OF PATENT RIGHTS. If of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPI.	MAINS) CLOSED in this application. If not included appropriate communication will be mailed in due course. THIS This application is subject to withdrawal from issue at the initia
1. This communication is responsive to <u>Appeal Brief filed 2/19/08</u> .	
2. X The allowed claim(s) is/are <u>1-7,11-26, 28-31, 38-43</u> .	
 Acknowledgment is made of a claim for foreign priority under 35 U a)	peived.
* Certified copies not received:	
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this concted below. Failure to timely comply will result in ABANDONMENT of tHIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	
 A SUBSTITUTE OATH OR DECLARATION must be submitted. Not INFORMAL PATENT APPLICATION (PTO-152) which gives reason 	
5. CORRECTED DRAWINGS (as "replacement sheets") must be subr	nitted.
(a) I including changes required by the Notice of Draftsperson's Pate	ent Drawing Review (PTO-948) attached
 hereto or 2) ☐ to Paper No./Mail Date 	
(b) ☐ including changes required by the attached Examiner's Amendal Paper No./Mail Date	nent / Comment or in the Office action of
Identifying indicia such as the application number (see 37 CFR 1.84(c)) she each sheet. Replacement sheet(s) should be labeled as such in the header	
 DEPOSIT OF and/or INFORMATION about the deposit of BIO attached Examiner's comment regarding REQUIREMENT FOR THE 	
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal Patent Application
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary (PTO-413),
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Date 7.
Paper No./Mail Date	8. Examiner's Statement of Reasons for Allowance
of Biological Material	9. ☐ Other .

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

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Application/Control Number: 10/617,978

Art Unit: 1638

Examiner's Statement Of Reasons For Allowance

The following is an examiner's statement of reasons for allowance: The 112, 1st rejections are withdrawn because toxicity of the proteins encoded by the claimed nucleic acids towards humans is not the issue; numerous pesticides are toxic to mammals and many are known neurotoxins.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, whose telephone number is (571) 272-0801.
 The examiner can normally be reached Monday through Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor. Anne Marie Grunberg, can be reached at (571) 272-0975.

The central fax number for official correspondence is (571) 273-8300.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

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Art Unit: 1638

Anne R. Kubelik, Ph.D. May 6, 2008

/Anne R. Kubelik/ Primary Examiner, Art Unit 1638